

# NOMENCLATURAL CHANGES AND NEW SPECIES OF SCOLYTIDAE (COLEOPTERA), PART IV

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ABSTRACT.— Presented from a worldwide treatment of the Scolytidae are cases of new synonymy, replacement names for newly detected junior homonyms, and the descriptions of species new to science as follows. New synonymy includes: *Acanthotomicus quadrituberculatus* (Schedl) (= *Mimips fallax* Eggers), *Amasa schliehi* (Stebbing) (= *Xyleborus glaber* Eggers, *Xyleborus brevipennis* Schedl), *Ambrosiodmus apicalis* (Blandford) (= *Xyleborus cristatus* Hagedorn, *Xyleborus fabricii* Schedl), *Ambrosiodmus asperatus* (Blandford) (= *Xyleborus citri* Beeson, *Xyleborus cristatuloides* Schedl), *Ambrosiodmus colossus* (Blandford) (= *Xyleborus szcutitanyi* Schedl), *Ambrosiodmus declivispinatus* (Schedl) (= *Xyleborus tectus* Schedl), *Ambrosiodmus funereus* (Lea) (= *Xyleborus nepos robustus* Schedl), *Ambrosiodmus hagedornii* (Iglesias) (= *Ambrosiodmus guatemalensis* Hopkins), *Ambrosiodmus lewisi* (Blandford) (= *Xyleborus lewickianus* Eggers), *Ambrosiodmus obliquicaudata* (Motschulsky) (= *Xyleborus semirufus* Schedl), *Ambrosiodmus obliquus* (LeConte) (= *Xyleborus melanarius* Schedl), *Ambrosiodmus rubricollis* (Eichhoff) (= *Xyleborus taboensis* Schedl, *Xyleborus strohmeyeri* Schedl), *Arixyleborus canaliculatus* (Eggers) (= *Arixyleborus subsimilis* Schedl), *Arixyleborus imitator* (Eggers) (= *Xyleborus graustriatus* Eggers), *Arixyleborus leprosolus* Schedl (= *Arixyleborus aralidii* Nunberg), *Arixyleborus mediosectus* (Eggers) (= *Xyleboricus angulatus* Schedl), *Camptocerus major* (Eggers) (= *Camptocerus uniseriatus* Schedl), *Camptocerus orientalis* Eggers (= *Camptocerus tectus* Eggers), *Camptocerus suturalis* (Fabricius) (= *Camptocerus hirtipennis* Schedl), *Coccotrypes advena* Blandford (= *Dendrurgus philippinensis* Eggers, *Dendrurgus ternatensis* Eggers, *Dendrurgus minor* Eggers, *Thamnurgides thuitulensis* Beeson), *Coccotrypes barbatus* (Schedl) (= *Thamnurgides ater* Eggers, *Thamnurgides dipterocarpi* Beeson, *Thamnurgides bambusae* Beeson), *Coccotrypes carpophagus* (Hornung) (= *Coccotrypes trevori* Beeson, *Coccotrypes pilosulus* Schedl, *Coccotrypes ceylonicus* Schedl, *Coccotrypes grisscopuberulus* Schedl, *Coccotrypes exasperatus* Schedl, *Coccotrypes cyperi* (Beeson) (= *Poecilips subaplanatus* Schedl), *Coccotrypes dactyliperda* (Fabricius) (= *Coccotrypes borassi* Beeson, *Coccotrypes eleocarpus* Beeson), *Coccotrypes longior* (Eggers) (= *Poecilips oblongus* Eggers, *Poecilips nitidipennis* Schedl, *Poecilips apicatus* Schedl), *Coccotrypes myristicae* (Roepke) (= *Thamnurgides masoni* Beeson), *Coccotrypes nitidus* Eggers (= *Poecilips aterrimus* Schedl), *Coccotrypes umbilicus* Blandford (= *Thamnurgides parvus* Beeson, *Thamnurgides himalayensis* Beeson, *Thamnurgides corticus* Beeson, *Thamnurgides brevipilosus* Beeson, *Poecilips mauritanicus* Browne), *Coccotrypes papuanus* (Eggers) (= *Thamnurgides rubidus* Beeson), *Coccotrypes rhizophorae* (Hopkins) (= *Thamnurgides shanorum* Beeson), *Coccotrypes salakensis* (Schedl) (= *Thamnurgides opacifrons* Beeson, *Poecilips acuminatus* Schedl), *Conophthorus edulis* Hopkins (= *Conophthorus cembroides* Wood), *Conophthorus resinosa* Hopkins (= *Conophthorus banksianae* McPherson), *Coptoborus usagarius* (Eggers) (= *Xyleborus usagarius subadjunctus* Schedl, *Streptocranus hendrickxi* Schedl, *Xyleborus monticolus* Schedl, *Xyleborus fallaciosus* Schedl), *Coptodryas elegans* (Sampson) (= *Xyleborus concinnus* Beeson), *Coptodryas myristicae* (Schedl) (= *Xyleborus theae* Eggers, *Xyleborus brevipilosus* Eggers, *Xyleborus cylindripennis* Schedl), *Coptodryas nugax* (Schedl) (= *Xyleborus fragosus* Schedl), *Coptodryas recidens* (Sampson) (= *Xyleborus minutissimus* Eggers), *Coptodryas undulatus* (Sampson) (= *Xyleborus leprosolus* Schedl), *Cryphalus major* Stebbing (= *Cryphalus morinda* Stebbing), *Cryphalus ruficollis* Hopkins (= *Cryphalus fraseri* Hopkins), *Cryphalus scabricollis* Eichhoff (= *Cryphalus discretus* Eichhoff, *Cryphalus dilutus* Eichhoff), *Cryphalus sylvicola* (Perkins) (= *Cryphalus suzewyi* Schedl, *Cryphalus sylvicola obliquus* Schedl), *Crypturgus pusillus* (Gyllenhal) (= *Crypturgus minimus* Eggers), *Cyrtogenius luteus* (Blandford) (= *Carposinus pini* Hopkins), *Dryocoetes autographus* (Ratzeburg) (= *Dryocoetes brasiliensis* Schedl), *Dryocoetops laevis* (Strohmeyer) (= *Poecilips loebli* Schedl), *Dryocoetoides paradoxus* (Schedl) (= *Xyleborus solitaripennis* Schedl), *Dryocoetoides pseudosolitarius* (Eggers) (= *Xyleborus pseudosolitarius schizolobus* Schedl), *Eccoptopterus gracilipes* (Eichhoff) (= *Xyleborus collaris* Eggers), *Eccoptopterus limbus* Sampson (= *Xyleborus squamulatus duplicatus* Eggers), *Eidophelus imitans* Eichhoff (= *Phellodendrophagus elegans* Krivolutskaya), *Ptilopodius nitidus* (Schedl), *Ernocladius corpulentus* (Sampson) (= *Margadillius corpulentus sundri* Schedl), *Ernoporus antennarius* Schedl (= *Euptilius papuanus* Browne), *Eucallacea andamanensis* (Blandford) (= *Xyleborus granulipennis* Eggers, *Xyleborus intextus* Beeson, *Xyleborus senachalensis* Beeson), *Eucallacea bicolor* (Blandford) (= *Xyleborus bicolor unimodus* Beeson, *Xyleborus rodgeri* Beeson, *Xyleborus rodgeri privatus* Beeson), *Eucallacea destruens* (Blandford) (= *Xyleborus pseudobarbatus* Schedl, *Xyleborus uandavivatus* Schedl), *Eucallacea fornicatus* (Eichhoff) (= *Xyleborus whitfordiendrus* Schedl, *Xyleborus perbrevis* Schedl, *Xyleborus schultzei* Schedl, *Xyleborus tapatapaoensis* Schedl), *Eucallacea quadratocollis* (Eggers) (= *Xyleborus duplicatus* Schedl), *Eucallacea sibsagaricus* (Eggers) (= *Xyleborus dalbergiae* Eggers), *Eucallacea velatus* (Sampson) (= *Xyleborus assamensis* Eggers, *Xyleborus asperipennis* Eggers), *Eucallacea wallacei* (Blandford) (= *Xyleborus siporani* Hagedorn, *Xyleborus oralicollis* Eggers, *Xyleborus perakeusis* Schedl), *Eucallacea xanthopus* (Eichhoff) (= *Xyleborus semirudis* Blandford,

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*Xyleborus rudis* Eggers, *Xyleborus semipilosus* Eggers, *Xyleborus neohybridus* Schedl, *Xyleborus artheybridus* (Schedl), *Gnathotrupes bituberculatus* (Blandford) (= *Gnathotrichus impressus* Schedl), *Gnathotrupes longipennis* (Blanchard) (= *Gnathotrichus obnixus* Schedl), *Gnathotrichus corthyloides* Schedl, *Gnathotrichus corthyloformis* Schedl, *Gnathotrupes constrictus* (Schedl), *Gymnochilus consocius* (Blandford) (= *Problechilus novaeutonicus* Schedl), *Hypocryphalus mangiferae* (Stebbing) (= *Hypocryphalus opacus* Schedl), *Hypocryphalus sandakanensis* (Schedl) (= *Hypocryphalus maculatus* Browne), *Hypothenemus arecae* (Hornung) (= *Stephanoderes bambesanus* Eggers), *Hypothenemus bauhaniae* Schedl, *Stephanoderes occidentalis* (Schedl), *Hypothenemus birmanus* Eichhoff (= *Stephanoderes nibarani* Beeson, *Stephanoderes ampliatus* Eggers), *Hypothenemus californicus* Hopkins (= *Stephanoderes zcae* Schedl), *Hypothenemus crudiae* (Panzer) (= *Cryphalus mucronifer* Wollaston), *Hypothenemus donisi* (Schedl) (= *Ercyphalus madagascarensis* Schedl), *Hypothenemus eruditus* Westwood (= *Cryphalus tectonae* Stebbing, *Cryphalus striatopunctatus* Lea, *Cryphalus tantillus* Lea, *Hypothenemus tuberculatus* Hagedorn, *Hypothenemus pusillus* Eggers, *Hypothenemus argentinensis* Schedl, *Hypothenemus cylindricus* Schedl, *Hypothenemus asaroriensis* Beeson, *Hypothenemus mauiciensis* Schedl, *Stephanoderes nanulus* Schedl, *Hypothenemus parilis* Schedl, *Hypothenemus obscuripes* Schedl, *Stephanoderes tigris* Schedl, *Hypothenemus parcius* Schedl, *Hypothenemus cylindripennis* Schedl, *Hypothenemus rianai* Schedl, *Hypothenemus mesoleius* Schedl, *Hypothenemus minutulus* Schedl, *Cryphalus minutus* (Schedl), *Hypothenemus fuscicollis* (Eichhoff) (= *Stephanoderes sundaeensis* Eggers, *Hypothenemus ghanaensis* Schedl), *Hypothenemus hampei* (Ferrari) (= *Stephanoderes glabellus* Schedl), *Hypothenemus ingens* (Schedl) (= *Cryphalomorphus grandis* Schedl), *Hypothenemus plumeriae* (Nördlinger) (= *Stephanoderes cylindricus* Hopkins, *Hypothenemus guadeloupensis* Schedl, *Stephanoderes ituriensis* Schedl), *Hypothenemus pubescens* Hopkins (= *Hypothenemus minutissimus* Schedl), *Hypothenemus seriatus* (Eichhoff) (= *Cryphalus aulmanni* Hagedorn, *Hypothenemus cassaraensis* Schedl, *Stephanoderes hawaiiensis* Schedl, *Hypothenemus striatulus* Schedl, *Hypothenemus marotoayi* Schedl, *Hypothenemus asperatus* Schedl), *Hypothenemus stigmatus* (Schedl) (= *Stephanoderes garciae* Schedl), *Leptoxyleborus concisus* (Blandford) (= *Xyleborus incurvus* Eggers), *Leptoxyleborus depressus* (Eggers) (= *Xyleborus sejungatus* Schedl), *Leptoxyleborus semigranulatus* (Schedl) (= *Xyleborus artemarginatus* Schedl), *Monarthrum chapuisi* Kirsch (= *Monarthrum bolivianum* Eggers), *Monarthrum ingens* (Eichhoff) (= *Pterocyclus assequens* Schedl), *Pityophthorus deodara* (Stebbing) (= *Cryphalus himalayensis* Stebbing, *Pityophthorus sampsoni* Stebbing), *Saurophtilus sauropterus* (Schedl) (= *Xyleborus sauropteroides* Schedl), *Scolytogenes knabi* (Hopkins) (= *Cryphalomorphus alienus* Schedl), *Scolytomimus pusillus* (Eggers) (= *Scolytomimus kalshoveni* Schedl, *Scolytoleptes insularis* Schedl), *Scolytoplattypus mikado* Blandford (= *Scolytoplattypus sinensis* Tsai & Huang), *Scolytoplattypus papuanus* Eggers (= *Scolytoplattypus luzonicus* Eggers), *Scolytoplattypus siomio* Blandford (= *Scolytoplattypus kunala* Strohmeyer), *Scolytopsis puncticollis* Blandford (= *Scolytopsis cubensis* Wood), *Terminalinus crucipennis* (Schedl) (= *Xyleborus metaeucifer* Browne), *Terminalinus hirtus* (Hagedorn) (= *Xyleborus hirtuosus* Beeson), *Trypodendron laeae* Eggers (= *Trypodendron piceum* Strand), *Theoborus ricini* (Eggers) (= *Xyleborus solitariceps* Schedl), *Webbia quattuordecimspinus* or *14-spinatus* Sampson (= *Webbia quattuordecimspinus* or *14-spinatus* Schedl), *Xyleborinus andrewesi* (Blandford) (= *Xyleborus persphenos* Schedl), *Xyleborinus artestriatus* (Eichhoff) (= *Xyleborus rugipennis* Schedl), *Xyleborinus gracilis* (Eichhoff) (= *Xyleborus neogracilis* Schedl), *Xyleborinus saxensis* (Ratzeburg) (= *Xyleborus subspinosus* Eggers, *Xyleborus pseudogracilis* Schedl), *Xyleborus retrusus* Schedl, *Xyleborus paraguayensis* Schedl, *Xyleborus cinctipennis* Schedl), *Xyleborus adelographus* Eichhoff (= *Xyleborus accommodatus* Schedl), *Xyleborus adusticollis* (Motschulsky) (= *Xyleborus restitus* Schedl), *Xyleborus approximatus* Schedl (= *Xyleborus potens* Schedl), *Xyleborus biconicus* Eggers (= *Xyleborus bicinctus* Schedl), *Xyleborus bidentatus* (Motschulsky) (= *Xyleborus quadridens* Eggers), *Xyleborus carabicus* Eggers (= *Xyleborus variabilis* Schedl), *Xyleborus crinitus* Schedl (= *Xyleborus nigericus* Browne), *Xyleborus emarginatus* Eichhoff (= *Xyleborus emarginatus semicircularis* Schedl), *Xyleborus eximius* Schedl (= *Xyleborus apicnotatus* Schedl), *Xyleborus fallax* Eichhoff (= *Xyleborus amphicranulus* Eggers), *Xyleborus ferrugineus* (Fabricius) (= *Xyleborus rufopiceus* Eggers), *Xyleborus grossmanni* Schedl (= *Xyleborus acuminatus* Schedl), *Xyleborus masecaniformis* Eggers (= *Xyleborus onerosus* Schedl), *Xyleborus multispinus* Eggers (= *Xyleborus acanthus* Schedl), *Xyleborus mutabilis* Schedl (= *Xyleborus itatiyaensis* Schedl), *Xyleborus perforans* (Wollaston) (= *Xyleborus criticus* Schedl), *Xyleborus perlongus* Eggers (= *Xyleborus pulcherrimus* Schedl, *Xyleborus pulcheripes* Schedl), *Xyleborus similis* Ferrari (= *Xyleborus novaguineanus* Schedl, *Xyleborus dilatatus* Schedl), *Xyleborus subcostatus* Eichhoff (= *Xyleborus subcostatus dearmatus* Eggers), *Xyleborus sulcicauda* Schedl (= *Xyleborus tenuipennis* Browne), *Xyleborus colulus* (Fabricius) (= *Xyleborus silvestris* Beeson, *Xyleborus granularis* Schedl), *Xylosandrus ater* (Eggers) (= *Xyleborus retusiformis* Schedl), *Xylosandrus cylindrotomicus* (Schedl) (= *Xyleborus semitruncatus* Schedl, *Xyleborus ramulorum* Schedl), *Xylosandrus mutilatus* (Blandford) (= *Xyleborus sampsoni* Eggers). The species *Cosmocorynus ragabundus* Schedl is transferred to the genus *Amphicranus*, and the species *Xyleborus lineatopunctatus* Eggers is transferred to the genus *Cyrtogenius*. New names are proposed for junior homonyms as follows: *Araptus frontis* (for *Gnathocranus frontalis* Schedl 1978, now in *Araptus*), *Araptus guadeloupanus* (for *Brachydendrolus guadeloupensis* Schedl 1970, now in *Araptus*), *Coccotrypes brunneipes* (for *Coccotrypes brunneus* Numberg 1973), *Coccotrypes robustulus* for *Pocilips robustus* Schedl 1972, now in *Coccotrypes*, *Coccotrypes striatulus* (for *Thamnurgides striatus* Eggers 1927, now in *Coccotrypes*), *Hypothenemus aterrimulus* (for *Lepiceroideus aterrimus* Schedl 1957, now in *Hypothenemus*), *Hypothenemus ruginosus* (for *Pachynoderes rugifer* Schedl 1977, now in *Hypothenemus*), *Miniocurus monticulus* (for *Miniocurus montanus* Schedl 1957), *Monarthrum boliviensis* (for *Cosmocorynus bolivianus* Schedl 1970, now in *Monarthrum*), *Monarthrum dentatulum* (for *Monarthrum dentatum* Eggers 1935), *Monarthrum sexdentulum* (for *Anchoceros sexdentatus* Eggers 1935, now in *Monarthrum*), *Pityophthorus abietinus* (for *Pityophthorus abietis* Kurenzov 1941 and *P. sibericus* Numberg 1956), *Pityophthorus brighti* (for *Pityophthorus blackmani* Bright 1977), *Pityophthorus micrograptinus* (for *Breviophthorus micrographus* Schedl 1972, now in *Pityophthorus*), *Pityophthorus subsimilis* (for *Breviophthorus subsimilis* Schedl 1966, now in *Pityophthorus*),

*Scolytogenes papuensis* (For *Xylocryptus papuanus* Schedl 1975, now in *Scolytogenes*. The following names are described as new to science: *Cryphalus dipteroearpi* (India), *Cryphalus felis* (India), *Cryphalus fulmineus* (India), *Gnathotrupes colaphus* (Venezuela), *Gnathotrupes nectandrae* (Venezuela), *Miniocurus beesoni* (India), *Pityophthorus cedri* (India), *Pityophthorus chilgoza* (India), *Pityophthorus glutac* (India), and *Scolytogenes indicus* (India).

During the compilation of a world catalog of Scolytidae and Platypodidae (Part 1, the bibliography, published as Wood and Bright 1987), a number of taxonomic errors, omissions, and discrepancies were encountered that require validation or correction before the taxonomic portion of the catalog is published. This article is written for the purpose of attending to those taxonomic housekeeping chores. Included are 214 cases of new or previously unconfirmed synonymy, 16 new names proposed as replacements for junior homonyms, 2 species transferred from the genus where each was originally named to the genus where each properly belongs in current classification, and 10 species (8 from India, 2 from Venezuela) named as new to science.

#### NEW SYNONYMY

Listed below is new synonymy of species from all areas of the world. The synonymy was discovered in recent visits to museums, the most notable visits being made by me to (1) the Institute of Zoology, Academy of Science, Moscow, in 1968 to study the Motschulsky types from Sri Lanka and India; (2) the Forest Research Institute (hereafter FRI), Dehra Dun, India, in 1981 to study types named by Stebbing, Beeson, and Eggers from India and neighboring areas; (3) the Naturhistorische Museum Wien, in 1983 to study types named by Schedl and Ferrari; and (4) the British Museum (Natural History) in 1981 to study the types of species named by Browne, etc. A few additional types were received through loans from various other institutions. Each species is listed in alphabetical order under the senior name with its author and year and page of original validation of that name. If the specific name has been transferred to the current genus, the original genus is indicated. Next, the kind of type or other specimen on which the synonymy was based is indicated; and following this, in parentheses, is the original combination of the new synonym, with its author and year and page of validation, and the kind of type or other specimens on which the synonymy is based. Unless otherwise noted, the direct comparisons were made by

me or direct comparisons were made to my specimens, which were then compared directly to the synonym. While many of the synonymies are not based on the primary type of one or both members, the identifications are deemed sufficiently authentic to list along with a recommendation to future workers to confirm these observations with additional study. For complete references to the literature cited by the author, names, and validation dates, see S. L. Wood and D. E. Bright (1987). The treatment of genera is based on S. L. Wood (1986).

*Acantotomicus quadrituberculatus* (Schedl 1938:173), originally in *Isophthorus*, holotype in Wien Museum compared to (= *Mimips fallax* Eggers 1943:76) paratype in Wien Museum.

*Amasa schlichii* (Stebbing 1914:592), originally in *Xyleborus*, FRI syntypes compared to (= *Xyleborus glaber* Eggers 1930:387) holotype at FRI, also compared to (= *Xyleborus brevipennis* Schedl 1971:387) my homotypes, holotype also examined.

*Ambrosiodmus apicalis* (Blandford 1894:105), originally in *Xyleborus*, my homotypes, holotype examined, compared to (= *Xyleborus cristatus* Hagedorn 1908:377 and its replacement *Xyleborus fabricii* Schedl 1964:217) Schedl homotypes in Wien Museum.

*Ambrosiodmus asperatus* (Blandford 1895:321), originally in *Xyleborus*, my homotypes, holotype examined, compared to (= *Xyleborus citri* Beeson 1930:215) FRI syntypes, also (= *Xyleborus cristatuloides* Schedl 1971:284) Schedl paratype in Wien Museum.

*Ambrosiodmus colossus* (Blandford 1896:207), originally in *Xyleborus*, female determined by Schedl in Wien Museum compared to (= *Xyleborus szentivanyi* Schedl 1968:267) holotype in Wien Museum.

*Ambrosiodmus declivispinatus* (Schedl 1970:216), originally in *Xyleborus*, Schedl paratypes in Wien Museum compared to (= *Xyleborus tectus* Schedl 1972:63) Schedl paratype in Wien Museum.

*Ambrosiodmus funereus* (Lea 1910:139), originally in *Xyleborus*, Schedl specimens in Wien Museum compared to (= *Xyleborus*



*nepos robustus* Schedl 1933:103) Schedl syntypes in Wien Museum.

*Ambrosiodmus hagedorni* (Iglesias 1914:128), originally in *Xyleborus*, Schedl paratypes in Wien Museum compared to (= *Ambrosiodmus guatemalensis* Hopkins 1915:56) my homotypes, holotype in U.S. National Museum examined.

*Ambrosiodmus lewisi* (Blandford 1894:104), originally in *Xyleborus*, my homotypes, syntypes in British Museum (Natural History) examined, compared to (= *Xyleborus lewckianus* Eggers 1923:181) Beeson and Eggers homotypes in FRI.

*Ambrosiodmus obliquecaudata* (Motschulsky 1863:513), originally in *Phloeotrogus*, my homotypes, syntypes examined, compared to (= *Xyleborus semirufus* Schedl 1959:499) paratype in Wien Museum, holotype examined.

*Ambrosiodmus obliquus* (LeConte 1878:432), originally in *Pityophthorus*, my homotypes, holotype examined, compared to (= *Xyleborus melanarius* Schedl 1978:307) holotype in Wien Museum.

*Ambrosiodmus rubricollis* (Eichhoff 1875:202), originally in *Xyleborus*, my homotypes, holotype examined, compared to (= *Xyleborus taboensis* Schedl 1952:65) holotype in Wien Museum, also compared to (= *Xyleborus strohmeieri* Schedl 1975:457) holotype in Wien Museum.

*Amphicranus vagabundus* (Schedl 1966:124), holotype examined, the species is here transferred from the original genus *Cosmocrynus* to *Amphicranus*.

*Arixyleborus canaliculatus* (Eggers 1923:216), originally in *Xyleboricus*, my homotypes, holotype examined, compared to (= *Arixyleborus subsimilis* Schedl 1970:362) Schedl paratypes in Wien Museum.

*Arixyleborus imitator* (Eggers 1927:105), originally in *Webbia*, my homotypes, holotype examined, compared to (= *Xyleborus granistriatus* Eggers 1940:147) holotype in Wien Museum.

*Arixyleborus leprosulus* Schedl 1953:300, my homotypes, lectotype in Wien Museum, compared to (= *Arixyleborus aralidii* Nunberg 1960:618) holotype in British Museum (Natural History).

*Arixyleborus mediosextus* (Eggers 1923:215), originally in *Xyleboricus*, Eggers metatypes in Wien Museum compared to

(= *Xyleboricus angulatus* Schedl 1942:183) lectotype in Wien Museum.

*Camptocerus major* (Eggers 1929:60), originally in *Loganius*, holotype in Wien Museum compared to (= *Camptocerus uniseriatus* Schedl 1972:54) holotype in Wien Museum.

*Camptocerus orientalis* Eggers 1943:244, male paratype in Wien Museum compared to (= *Camptocerus tectus* Eggers 1943:244) male paratype in Wien Museum.

*Camptocerus suturalis* (Fabricius 1801:393), my homotypes, syntypes in Copenhagen Museum examined, compared to (= *Camptocerus hirtipennis* Schedl 1973:165) female allotype in Wien Museum.

*Coccotrypes advena* Blandford 1894:100, my homotypes, holotype in British Museum (Natural History) examined, compared to (= *Dendrurgus philippinensis* Eggers 1923:145) my homotypes, holotype examined, also compared to (= *Dendrurgus ternatensis* Eggers 1923:146) syntypes in Wien Museum, also compared to (= *Dendrurgus minor* Eggers 1923:150) my homotypes, lectotype examined, also compared to (= *Thamnurgides tutuilensis* Beeson 1929:229) paratypes, holotype examined.

*Coccotrypes barbatus* (Schedl 1934:90), originally in *Thamnurgides*, my homotypes, lectotype examined, compared to (= *Thamnurgides ater* Eggers 1936:84) one Wien Museum cotype, also compared to (= *Thamnurgides dipterocarpi* Beeson 1939:288) FRI syntypes, also compared to (= *Thamnurgides bambusae* Beeson 1939:289) FRI syntypes.

*Coccotrypes carpophagus* (Hornung 1842:116), originally in *Bostrichus*, my homotypes, syntypes examined, compared to (= *Coccotrypes trevori* Beeson 1939:282) holotype in FRI, also compared to (= *Coccotrypes pilosulus* Schedl 1949:118) holotype in Wien Museum, also compared to (= *Coccotrypes ceylonicus* Schedl 1949:119) lectotype in Wien Museum, also compared to (= *Coccotrypes grisseopuberulus* Schedl 1972:59) holotype in Wien Museum, also compared to (= *Coccotrypes exasperatus* Schedl 1975:455) paratype in Wien Museum.

*Coccotrypes cyperi* (Beeson 1929:230), originally in *Thamnurgides*, my homotypes compared to (= *Poecilips subaplanatus* Schedl 1942:23) lectotype in Wien Museum.

*Coccotrypes dactyliperda* (Fabricius 1801:387) my specimens that were compared to



Eggers homotypes compared to (= *Coccotrypes borassi* Beeson 1939:283) holotype in FRI, also compared to (= *Coccotrypes elaeocarpi* Beeson 1939:284) holotype in FRI.

*Coccotrypes longior* (Eggers 1927:83), originally in *Poecilips*, my homotypes, holotype examined, compared to (= *Poecilips oblongus* Eggers 1927:83) lectotype in U.S. National Museum and two paratypes in Wien Museum, also compared to (= *Poecilips nitidipennis* Schedl 1950:896) holotype in Wien Museum, also compared to (= *Poecilips apicatus* Schedl 1971:372) holotype in Wien Museum.

*Coccotrypes myristicae* (Roepke 1919:23), originally in *Thamnurgides*, Eggers homotypes compared to (= *Thamnurgides masoni* Beeson 1939:292) FRI syntypes.

*Coccotrypes nitidus* (Eggers 1923:147), originally in *Dendrugus*, holotype in Wien Museum compared to (= *Poecilips aterrimus* Schedl 1953:298) holotype in Wien Museum.

*Coccotrypes nubilus* (Blandford 1894:95), originally in *Dryocoetes*, my homotypes, syntypes examined, compared to (= *Thamnurgides parvus* Beeson 1939:297) holotype in FRI, also compared to (= *Thamnurgides himalayensis* Beeson 1939:299) holotype in FRI, also compared to (= *Thamnurgides corticus* Beeson 1939:298) holotype in FRI, also compared to (= *Thamnurgides brevipilosus* Beeson 1939:298) holotype in FRI, also compared to (= *Poecilips mauritanus* Browne 1970:569) holotype in British Museum (Natural History).

*Coccotrypes papuanus* (Eggers 1923:148), originally in *Dendrugus*, my homotypes, lectotype in Wien Museum examined, compared to (= *Thamnurgides rubidus* Beeson 1939:290) holotype in FRI.

*Coccotrypes rhizophorae* (Hopkins 1915:48), originally in *Spermatoplex*, my homotypes, lectotype in U.S. National Museum examined, compared to (= *Thamnurgides shanorum* Beeson 1939:296) holotype in FRI.

*Coccotrypes salakensis* (Schedl 1939:38), originally in *Poecilips*, my homotypes, lectotype in Wien Museum examined, compared to (= *Thamnurgides opacifrons* Beeson 1939:294) holotype in FRI, also compared to (= *Poecilips acuminatus* Schedl 1966:34) syntypes in Wien Museum.

*Conophthorus edulis* Hopkins 1915:430, holotype in U.S. National Museum compared to (= *Conophthorus cembroides* Wood 1971:74) holotype in Wood Collection.

*Conophthorus resinosae* Hopkins 1915:431, holotype in U.S. National Museum compared to (= *Conophthorus banksianae* McPherson 1970:1020) several paratypes in U.S. National Museum and many other specimens.

*Coptoborus usagaricus* (Eggers 1922:172), originally in *Xyleborus*, a paratype and Eggers homotypes compared to (= *Xyleborus usagaricus subadjunctus* Schedl 1950:28) holotype in British Museum (Natural History), also compared to (= *Streptocranus hendrickxi* Schedl 1953:245) lectotype in Wien Museum, also compared to (= *Xyleborus monticolus* Schedl 1957:113) paratypes in Wien Museum, also compared to (= *Xyleborus fallaciosus* Schedl 1957:114) paratypes in Wien Museum.

*Coptodryas elegans* (Sampson 1923:288), originally in *Xyleborus*, my homotypes, holotype in British Museum (Natural History) examined, compared to (= *Xyleborus concinnus* Beeson 1930:214) holotype in FRI.

*Coptodryas myristicae* (Schedl 1939:49), originally in *Xyleborus*, lectotype in Wien Museum compared to (= *Xyleborus theae* Eggers 1940:144) Eggers cotype in Wien Museum, also compared to (= *Xyleborus brevipilosus* Eggers 1940:145) Eggers cotype, also compared to (= *Xyleborus cylindripennis* Schedl 1954:152) lectotype in Wien Museum.

*Coptodryas nugax* (Schedl 1939:353), originally in *Xyleborus*, lectotype in Wien Museum compared to (= *Xyleborus fragosus* Schedl 1942:41) lectotype in Wien Museum.

*Coptodryas recidens* (Sampson 1923:287), originally in *Xyleborus*, my homotypes, holotype in British Museum (Natural History) examined, compared to (= *Xyleborus minutissimus* Eggers 1930:204) holotype in FRI.

*Coptodryas undulatus* (Sampson 1919:111), originally in *Xyleborus*, my homotypes, lectotype in British Museum (Natural History) examined, compared to (= *Xyleborus leprosulus* Schedl 1936:27) lectotype in Wien Museum.

*Cryphalus major* Stebbing 1903:270, holotype in FRI compared to (= *Cryphalus morinda* Stebbing 1903:265) holotype in FRI. Name selection based on first revisor's choice.

*Cryphalus ruficollis* Hopkins 1915:39, holotype in U.S. National Museum compared to (= *Cryphalus fraseri* Hopkins 1915:40) holotype in U.S. National Museum. This was

earlier recognized by me as a subspecies of *C. ruficollis*; however, the observed variation now appears to involve gradual, primary clinal variation over vast distances and does not warrant subspecies recognition, as geographical races are now understood.

*Cryphalus scabricollis* Eichhoff 1878:491, holotype in Hamburg Museum examined by Beeson before it was destroyed in 1944, his homotypes were compared to (= *Cryphalus discretus* Eichhoff 1878:490) Beeson homotypes in FRI, also compared to (= *Cryphalus dilutus* Eichhoff 1878:490) Beeson homotypes in FRI. My examination of several hundred specimens in the Beeson Collection at FRI indicates that these three names all apply to the same species. The name *scabricollis* was selected for this species by first revisor's choice, because it is more descriptive of the species.

*Cryphalus sylvicola* (Perkins 1900:181), originally in *Hypothenemus*, my homotypes, syntypes in British Museum (Natural History) examined, compared to (= *Cryphalus swezeyi* Schedl 1942:48) lectotype in Wien Museum, also compared to (= *sylvicola obliquus* Schedl 1950:48) lectotype in Wien Museum.

*Crypturgus pusillus* (Gyllenhal 1813:371), my specimens compared to Eggers homotypes were compared to (= *Polygraphus minimus* Stebbing 1902:252) Stebbing and Beeson specimens of this species, syntypes apparently lost or labels removed.

*Cyrtogenius lineatopunctatus* (Eggers 1927:401), originally in *Xyleborus*, this species is here transferred to *Cyrtogenius*.

*Cyrtogenius luteus* (Blandford 1894:94), originally in *Dryocoetes*, it is here transferred to *Cyrtogenius*, and my homotypes, syntypes in British Museum (Natural History), compared to (= *Carposinus pini* Hopkins 1915:47) holotype in U.S. National Museum.

*Dryocoetes autographus* (Ratzeburg 1837:160), syntypes not located, several hundred European identified examples examined, some of them compared to (= *Dryocoetes brasiliensis* Schedl 1940:207) syntypes in Wien Museum.

*Dryocoetiops laevis* (Strohmeyer 1911:22), originally in *Ozopemon*, Eggers homotypes and a paratype compared to (= *Poecilips loebli* Schedl 1972:227) Schedl homotypes.

*Dryocoetoides paradoxus* (Schedl 1972:71), originally in *Xyleborus*, holotype in Wien

Museum compared to (= *Xyleborus solitariipennis* Schedl 1976:77) holotype in Wien Museum.

*Dryocoetoides pseudosolitarius* (Eggers 1933:28), originally in *Xyleborus*, my homotypes, holotype in Paris Museum examined, compared to (= *Xyleborus pseudosolitarius schizolobius* Schedl 1950:179) lectotype in Wien Museum.

*Eccoptopterus gracilipes* (Eichhoff 1886:25), originally in *Platydictylus*, Eggers homotypes compared to (= *Xyleborus collaris* Eggers 1923:194) my homotypes, lectotype in U.S. National Museum.

*Eccoptopterus limbis* Sampson 1911:381, my homotypes, holotype in British Museum (Natural History) examined, compared to (= *Xyleborus squamulatus duplicatus* Eggers 1923:193) lectotype in U.S. National Museum.

*Eidophelus imitans* Eichhoff 1875:201, my homotypes, one syntype in British Museum (Natural History) examined, compared to (= *Phellodendrophagus elegans* Krivolutskaya 1958:150?) specimens (paratypes?) from original series in my collection, also compared to (= *Ptilopodius nitidus* Schedl 1959:475) holotype in Wien Museum.

*Ernocladius corpulentus* (Sampson 1919:113), originally in *Cryphalus*, my syntypes, holotype in British Museum (Natural History) examined, compared to (= *Margadillius corpulentus sundri* Schedl 1969:48) Schedl's "paratype," which appears to be the holotype.

*Ernoporus antennarius* Schedl 1974:461, my series that was compared to paratypes was compared to (= *Euptilius papuanus* Browne 1984:70) a paratype.

*Euwallacea andamanensis* (Blandford 1896:222), originally in *Xyleborus*, my homotypes, holotype in British Museum (Natural History), compared to (= *Xyleborus granulipennis* Eggers 1930:194) FRI paratypes, lectotype in U.S. National Museum examined, also compared to (= *Xyleborus intextus* Beeson 1930:

211) holotype in FRI, also compared to (= *Xyleborus senachalensis* Beeson 1930:212) holotype in FRI.

*Euwallacea bicolor* (Blandford 1894:113), originally in *Xyleborus*, holotype in British Museum (Natural History) compared to (= *Xyleborus bicolor unimodus* Beeson 1929:238) holotype in British Museum (Natural

History), also compared to (= *Xyleborus rodgeri* Beeson 1930:213) holotype in FRI, also compared to (= *Xyleborus rodgeri privatus* Beeson 1930:213) holotype in FRI.

*Euwallacea destruens* (Blandford 1896:221), originally in *Xyleborus*, my homotypes, holotype in British Museum (Natural History), compared to (= *Xyleborus pseudobarbatus* Schedl 1942:193) syntypes in Wien Museum, also compared to (= *Xyleborus nandariatus* Schedl 1950:52) syntypes in Wien Museum.

*Euwallacea fornicatus* (Eichhoff 1868:151), originally in *Xyleborus*, Eggers homotypes compared to (= *Xyleborus whitfordiodendrus* Schedl 1942:189) lectotype in Wien Museum, also compared to (= *Xyleborus perbrevis* Schedl 1951:59) holotype in Wien Museum, also compared to (= *Xyleborus schultzei* Schedl 1958:68) lectotype in Wien Museum, also compared to (= *Xyleborus tapatapaoensis* Schedl 1951:152) lectotype in Wien Museum.

*Euwallacea quadraticollis* (Eggers 1923:197), originally in *Xyleborus*, my homotypes, lectotype in U.S. National Museum examined, compared to (= *Xyleborus duplicatus* Schedl 1933:102) holotype in Wien Museum.

*Euwallacea sibsagaricus* (Eggers 1930:196), originally in *Xyleborus*, holotype in FRI compared to (= *Xyleborus dalbergiae* Eggers 1930:196) holotype in FRI.

*Euwallacea velatus* (Sampson 1913:443), originally in *Xyleborus*, my homotypes, holotype in British Museum (Natural History) examined, compared to (= *Xyleborus assamensis* Eggers 1930:195) holotype in FRI, also compared to (= *Xyleborus asperipennis* Eggers 1934:27) holotype in FRI.

*Euwallacea wallacei* (Blandford 1896:220), originally in *Xyleborus*, my homotypes, holotype in British Museum (Natural History) examined, compared to (= *Xyleborus siporanus* Hagedorn 1910:11) Eggers homotype, also compared to (= *Xyleborus confinis* Eggers 1923:200) lectotype in Wien Museum, also compared to (= *Xyleborus ovalicollis* Eggers 1930:193) holotype in FRI, also compared to (= *Xyleborus perakensis* Schedl 1942:194) holotype in Wien Museum.

*Euwallacea xanthopus* (Eichhoff 1868:151), originally in *Xyleborus*, Beeson and Eggers homotypes (holotype lost with Hamburg Museum) compared to (= *Xyleborus semirudis* Blandford 1896:210) my homotypes, holotype

in British Museum (Natural History) also examined, also compared to (= *Xyleborus rudis* Eggers 1930:192) holotype in FRI, also compared to (= *Xyleborus semipilosus* Eggers 1932:300) Eggers homotypes, also compared to (= *Xyleborus neohybridus* Schedl 1942:188) syntypes in Wien Museum, also compared to (= *Xyleborus artehybridus* Schedl 1951:66) syntypes in Wien Museum.

*Gnathotrupes bituberculatus* (Blandford 1904:248), originally in *Gnathotrichus*, my homotypes, lectotype in British Museum (Natural History) examined, compared to (= *Gnathotrichus impressus* Schedl 1977:44) holotype in Wien Museum.

*Gnathotrupes longipennis* (Blanchard 1851:429), originally in *Tomicus*, Schedl homotypes in Wien Museum compared to (= *Gnathotrichus obnixus* Schedl 1939:47) one syntype in Wien Museum, also compared to (= *Gnathotrichus corthyloides* Schedl 1951:20) lectotype in Wien Museum, also compared to (= *Gnathotrichus corthyloformis* Schedl 1964:312) lectotype in Wien Museum, also compared to (= *Gnathotrupes constrictus* Schedl 1975:6) holotype in Wien Museum.

*Gymnochilus consocius* (Blandford 1897:171), originally in *Problechilus*, my homotypes, holotype in British Museum (Natural History) examined, compared to (= *Problechilus novateutonicus* Schedl 1936:105) holotype in Wien Museum.

*Hypocryphalus mangiferae* (Stebbing 1914:542), originally in *Cryphalus*, my homotypes, lectotype in British Museum (Natural History) examined, compared to (= *Hypocryphalus opacus* Schedl 1942:20) lectotype in Wien Museum.

*Hypocryphalus sandakanensis* (Schedl 1937:548), originally in *Cryphalus*, holotype in Wien Museum compared to (= *Hypocryphalus maculatus* Browne 1961:303) holotype in British Museum (Natural History).

*Hypothenemus areccae* (Hornung 1842:117), originally in *Bostrichus*, my homotypes, lectotype in Berlin Museum examined, compared to (= *Stephanoderes bambesanus* Eggers 1940:232) cotype in Wien Museum, also compared to (= *Hypothenemus bauhaniae* Schedl 1950:19) lectotype in Wien Museum, also compared to (= *Stephanoderes occidentalis* Schedl 1954:76) lectotype in Wien Museum.



*Hypothenemus birmanus* (Eichhoff 1878: 486) originally in *Triarmocerus*, my homotypes, holotype in Wien Museum examined, compared to (= *Stephanoderes nibarani* Beeson 1933:10) holotype in FRI, also compared to (= *Stephanoderes ampliatus* Eggers 1936:627) one cotype in Wien Museum, holotype in British Museum (Natural History) examined.

*Hypothenemus californicus* Hopkins 1915: 19, my homotypes, holotype in U.S. National Museum examined, compared to (= *Stephanoderes zae* Schedl 1973:169) paratypes in Wien Museum. This is an obvious introduction into America from Africa, Asia Minor, or southern Europe; however, it has not yet been associated with a synonym from those areas.

*Hypothenemus crudiae* (Panzer 1791:35), originally in *Bostrichus*, my series and Eggers homotypes compared to (= *Cryphalus mucronifer* Wollaston 1867:116) syntypes in British Museum (Natural History).

*Hypothenemus donisi* (Schedl 1957:46), originally in *Ericryphalus*, paratypes in Wien Museum compared to (= *Ericryphalus madagascariensis* Schedl 1961:131) paratypes in Wien Museum.

*Hypothenemus eruditus* Westwood 1836: 34, my homotypes, syntypes in British Museum (Natural History) examined, compared to (= *Cryphalus tectonae* Stebbing 1903:263) syntypes in FRI, also compared to (= *Cryphalus striatopunctatus* Lea 1910:142) Schedl homotypes in Wien Museum, also compared to (= *Cryphalus tantillus* Lea 1910:142) Schedl homotypes in Wien Museum, also compared to (= *Hypothenemus tuberculosus* Hagedorn 1912:339) one paratype in Wien Museum, also compared to (= *Hypothenemus pusillus* Eggers 1927:173) holotype in U.S. National Museum, also compared to (= *Hypothenemus argentinensis* Schedl 1939:408) lectotype in Wien Museum, also compared to (= *Hypothenemus cylindricus* Schedl 1939: 409) lectotype in Wien Museum, also compared to (= *Hypothenemus asaroriensis* Beeson 1940:195) holotype in FRI, also compared to (= *Hypothenemus mauensis* Schedl 1941:110) lectotype in Wien Museum, also compared to (= *Stephanoderes nanulus* Schedl 1949:263) lectotype in Wien Museum, also compared to (= *Hypothenemus parilis* Schedl 1951:100) lectotype in Wien Museum,

also compared to (= *Hypothenemus obscuriceps* Schedl 1951:449) lectotype in Wien Museum, also compared to (= *Stephanoderes tigrensis* Schedl 1952:452) lectotype in Wien Museum, also compared to (= *Hypothenemus parcius* Schedl 1957:49) paratypes in Wien Museum, also compared to (= *Hypothenemus cylindripennis* Schedl 1957:51) one paratype in Wien Museum, also compared to (= *Hypothenemus vianai* Schedl 1958:42) lectotype in Wien Museum, also compared to (= *Hypothenemus mesoleius* Schedl 1959:480) syntypes in Wien Museum, also compared to (= *Hypothenemus minutulus* Schedl 1972: 225) paratypes in Wien Museum, also compared to (= *Cryphalus minutus* Schedl 1978:299) holotype in Wien Museum.

*Hypothenemus fuscicollis* (Eichhoff 1878: 148), originally in *Stephanoderes*, Eggers homotype in Wien Museum compared to (= *Stephanoderes sundaensis* Eggers 1927: 396) holotype in Wien Museum, also compared to (= *Hypothenemus ghanaensis* Schedl 1962:67) one paratype in Wien Museum.

*Hypothenemus hampei* (Ferrari 1867:11, 12), originally in *Cryphalus*, syntypes in Wien Museum examined, compared to (= *Stephanoderes glabellus* Schedl 1951:452) lectotype in Wien Museum.

*Hypothenemus ingens* (Schedl 1942:18), originally in *Stephanoderes*, lectotype in Wien Museum compared to (= *Cryphalomorphus grandis* Schedl 1971:10) holotype in Wien Museum.

*Hypothenemus plumeriae* (Nördlinger 1856:74), originally in *Bostrichus*, holotype in Wien Museum compared to (= *Stephanoderes cylindricus* Hopkins 1915:25) my homotypes, holotype in U.S. National Museum examined, also compared to (= *Hypothenemus guadeloupensis* Schedl 1951:98) syntypes in Wien Museum, also compared to (= *Stephanoderes ituriensis* Schedl 1957:55) syntypes in Wien Museum.

*Hypothenemus pubescens* Hopkins 1915: 19, my homotypes, holotype in U.S. National Museum, compared to (= *Hypothenemus minutissimus* Schedl 1951:450) lectotype in Wien Museum.

*Hypothenemus seriatus* (Eichhoff 1872: 133), originally in *Stephanoderes*, my homotypes, lectotype in Brussels Museum, compared to (= *Cryphalus aulmanni* Hagedorn 1912:41) Eggers homotypes in Wien Museum,

also compared to (*Hypothenemus cas-sataensis* Schedl 1938:453) lectotype in Wien Museum, also compared to (*Stephanoderes hawaiiensis* Schedl 1941:112) syntypes in Bishop and Wien museums, also compared to (*Hypothenemus striatulus* Schedl 1942:12) lectotype in Wien Museum, also compared to (*Hypothenemus marovoayi* Schedl 1953:81) lectotype in Wien Museum, also compared to (*Stephanoderes asperatus* Schedl 1967:226) paratypes in Wien Museum.

*Hypothenemus stignosus* (Schedl 1951:101), originally in *Stephanoderes*, holotype in Wien Museum compared to (*Stephanoderes garciae* Schedl 1958:42) holotype in Wien Museum.

*Leptoxyleborus concisus* (Blandford 1894:107), originally in *Xyleborus*, my homotypes, holotype in British Museum (Natural History), compared to (*Xyleborus incurvus* Eggers 1930:197) holotype in FRI.

*Leptoxyleborus depressus* (Eggers 1923:190), originally in *Xyleborus*, holotype in Wien Museum compared to (*Xyleborus sejugatus* Schedl 1942:188) Schedl homotype in Wien Museum.

*Leptoxyleborus semigranulatus* (Schedl 1931:340), originally in *Xyleborus*, holotype in Wien Museum compared to (*Xyleborus artemarginatus* Schedl 1975:456) holotype in Wien Museum.

*Monarthrum chapuisi* Kirsch 1866:213, holotype in Berlin Museum compared to (*Monarthrum bolivianum* Eggers 1935:80) my homotype, holotype in U.S. National Museum examined.

*Monarthrum ingens* (Eichhoff 1869:278), originally in *Pterocyclon*, my homotypes, holotype in Brussels Museum examined, compared to (*Pterocyclon assequens* Schedl 1978:302) holotype in Wien Museum.

*Pityophthorus deodara* (Stebbing 1903:274), originally in *Cryphalus*, syntypes in FRI compared to (*Cryphalus himalayensis* Stebbing 1914:540) syntypes in FRI, also compared to (*Pityophthorus sampsoni* Stebbing 1914:551) syntypes in FRI.

*Sauroptilius sauropterus* (Schedl 1953:101), male holotype in Wien Museum and others in British Museum (Natural History) examined, holotype compared to (*Xyleborus sauropteroideus* Schedl 1970:237) female paratype in Wien Museum. These obviously are opposite sexes of the same species.

*Scolytogenes knabi* (Hopkins 1915:34), my homotypes, holotype in U.S. National Museum, compared to (*Cryphalomorphus alienus* Schedl 1976:65) holotype in Wien Museum. This species was collected by me in Japan in 1980, but I have not yet associated it with a name from that area. It obviously has been carried through commerce to many areas, but it has not yet been cited under this name outside America.

*Scolytomimus pusillus* (Eggers 1927:88), originally in *Neoxylotonus*, my homotypes, lectotype in U.S. National Museum examined, compared to (*Scolytomimus kalshoveni* Schedl 1940:132) one paratype in Wien Museum and my topotypes from the original series, also compared to (*Scolytocleptes insularis* Schedl 1962:491) holotype in Wien Museum.

*Scolytoplatypus mikado* Blandford 1893:437, my homotypes, syntypes in British Museum (Natural History) examined, compared to (*Scolytoplatypus sinensis* Tsai & Huang 1965:123) my paratypes.

*Scolytoplatypus papuanus* Eggers 1923:165, my homotypes, male homotype and female allotype in Wien Museum examined, compared to (*Scolytoplatypus luzonicus* Eggers 1935:244) holotype in U.S. National Museum.

*Scolytoplatypus siomio* Blandford 1893:436, my homotypes, syntypes in British Museum (Natural History) examined, compared to (*Scolytoplatypus kunala* Strohmeier 1908:161) holotype in Strohmeier Collection.

*Scolytopsis puncticollis* Blandford 1896:123, my homotypes, syntypes in British Museum (Natural History) examined, compared to (*Scolytopsis cubensis* Wood 1961:87) holotype in U.S. National Museum. The type series of *S. cubensis* apparently developed under adverse environmental conditions that resulted in abnormally small specimens. Series from Cuba examined subsequently bridge both the size and character gaps.

*Terminalinus crucipennis* (Schedl 1962:277), originally in *Xyleborus*, holotype in Wien Museum compared to (*Xyleborus metacrucifer* Browne 1965:201) my homotype, holotype in British Museum (Natural History) examined.

*Terminalinus hirtus* (Hagedorn 1904:126), originally in *Xyleborus*, Beeson homotypes and other series in FRI compared to (*Xyleborus hirtuosus* Beeson 1930:217) syntypes in FRI.

*Trypodendron laeve* Eggers 1939:122, syntypes in Wien Museum compared to (= *Trypodendron piceum* Strand 1946:172) Eggers homotypes (or paratypes?) in Wien Museum.

*Theoborus ricini* (Eggers 1932:298), originally in *Xyleborus*, my homotypes, holotype in U.S. National Museum examined, compared to (= *Xyleborus solitariceps* Schedl 1954:45) lectotype in Wien Museum.

*Webbia quattuordecimspinus* (or *14-spinatus*) Sampson 1921:34, my homotypes and male holotype in British Museum (Natural History) compared to (= *Webbia quattuordecimspinus* or *14-spinatus* Schedl 1942:182) female syntypes in British Museum (Natural History) and Wien Museum. Schedl appears to have inadvertently validated a new name and homonym when his intent was to describe the opposite sex of Sampson's species.

*Xyleborinus andrewesi* (Blandford 1896:227), originally in *Xyleborus*, my homotypes, holotype in British Museum (Natural History) examined, compared to (= *Xyleborus persphenos* Schedl 1970:219) one paratype in Wien Museum.

*Xyleborinus artestriatus* (Eichhoff 1878:507), originally in *Xyleborus*, my series, Eggers homotypes compared to (= *Xyleborus rugipennis* Schedl 1953:303) lectotype in Wien Museum.

*Xyleborinus gracilis* (Eichhoff 1868:145), originally in *Xyleborus*, my series, Eggers homotypes (holotype lost) compared to (= *Xyleborus neogracilis* Schedl 1954:46) lectotype in Wien Museum.

*Xyleborinus saxeseni* (Ratzeburg 1837:167), originally in *Bostrichus*, Eggers and Schedl homotypes (syntypes not located) compared to (= *Xyleborus subspinosus* Eggers 1930:203) holotype in FRI, also compared to (= *Xyleborus pseudogracilis* Schedl 1937:169) lectotype in Wien Museum, also compared to (= *Xyleborus retrusus* Schedl 1940:208) lectotype in Wien Museum, also compared to (= *Xyleborus paraguayensis* Schedl 1949:276) holotype in Wien Museum, also compared to (= *Xyleborus cinctipennis* Schedl 1980:186) holotype in Wien Museum.

*Xyleborus adelographus* Eichhoff 1868:400, my series and Eggers homotypes (syntypes lost) compared to (= *Xyleborus accomodatus* Schedl 1966:112) holotype in Wien Museum.

*Xyleborus adusticollis* (Motschulsky 1863:514), originally in *Tomicus*, holotype in Moscow Institute of Zoology examined and sketched (= *Xyleborus vestitus* Schedl 1931:341), holotype in Wien Museum compared to my specimen. The uniqueness of this species, my notes and diagrams, and the locality leave little doubt as to the identity of this species.

*Xyleborus approximatus* Schedl 1951:77, syntypes in Wien Museum compared to (= *Xyleborus potens* Schedl 1964:298) Schedl homotype in Wien Museum.

*Xyleborus biconicus* Eggers 1928:97, my homotypes, holotype in U.S. National Museum examined, compared to (= *Xyleborus bicinctus* Schedl 1972:69) holotype in Wien Museum, also compared to (= *Xyleborus bicinctulus* Schedl 1974:338) holotype in Wien Museum.

*Xyleborus bidentatus* (Motschulsky 1863:514), originally in *Phloeotrogus*, my homotypes, holotype in Moscow Institute of Zoology, compared to (= *Xyleborus quadridens* Eggers 1930:191) holotype (an aberration) in FRI.

*Xyleborus caraibicus* Eggers 1941:103, my homotypes, holotype in U.S. National Museum, compared to (= *Xyleborus variabilis* Schedl 1949:281) syntypes in Wien Museum.

*Xyleborus crinitus* Schedl 1962:301, my homotype, holotype in Wien Museum examined, compared to (= *Xyleborus nigericus* Browne 1970:572) holotype in British Museum (Natural History).

*Xyleborus emarginatus* Eichhoff 1878:510, my series, Eggers homotypes examined (holotype lost), compared to (= *Xyleborus emarginatus semicircularis* Schedl 1973:92) paratypes in Wien Museum.

*Xyleborus eximius* Schedl 1970:362, my specimens, paratypes in Wien Museum examined, compared to (= *Xyleborus apicenotatus* Schedl 1971:377) holotype in British Museum (Natural History).

*Xyleborus fallax* Eichhoff 1878:508, my homotypes, holotype in Brussels Museum, compared to (= *Xyleborus amphicranulus* Eggers 1923:204) syntypes in Wien Museum.

*Xyleborus ferrugineus* (Fabricius 1801:388), originally in *Bostrichus*, my homotypes, lectotype in Copenhagen Museum, compared to (= *Xyleborus rufopiceus* Eggers 1932:303) one paratype in Wien Museum.



*Xyleborus grossmanni* Schedl 1952:362, holotype in Wien Museum compared to (= *Xyleborus acuminatus* Schedl 1970:94) holotype in Wien Museum.

*Xyleborus mascareniformis* Eggers 1927:400, my specimens, Eggers homotype examined, compared to (= *Xyleborus onerosus* Schedl 1942:185) holotype in British Museum (Natural History).

*Xyleborus multispinatus* Eggers 1920:125, lectotype in Wien Museum compared to (= *Xyleborus acanthus* Schedl 1951:15) paratypes in Wien Museum.

*Xyleborus mutabilis* Schedl 1935:92, holotype in Wien Museum compared to (= *Xyleborus itatiayaensis* Schedl 1936:109) lectotype in Wien Museum.

*Xyleborus perforans* (Wollaston 1857:96), originally in *Tomicus*, my homotypes, syntypes in British Museum (Natural History) examined, compared to (= *Xyleborus criticus* Schedl 1950:899) lectotype in Wien Museum.

*Xyleborus perlongus* Eggers 1943:386, holotype in Wien Museum compared to (= *Xyleborus pulcnerrimus* Schedl 1949:38) holotype in Wien Museum, also compared to (= *Xyleborus pulcheripes* Schedl 1958:46) holotype in Wien Museum.

*Xyleborus similis* Ferrari 1867:23, my homotypes, holotype in Wien Museum examined and compared to (= *Xyleborus novaguineanus* Schedl 1936:530) holotype in Wien Museum, also compared to (= *Xyleborus dilatatus* Schedl 1953:127) lectotype in Wien Museum.

*Xyleborus subcostatus* Eichhoff 1869:281, my specimens, holotype in Brussels Museum examined, compared to (= *Xyleborus subcostatus dearmatus* Eggers 1923:205) holotype in Wien Museum. This synonym represents no more than an aberration.

*Xyleborus sulcicauda* Schedl 1972:271, holotype in Wien Museum compared to (= *Xyleborus tenuipennis* Browne 1974:71) Schedl homotype, holotype in British Museum (Natural History).

*Xyleborus volvulus* (Fabricius 1775:454), originally in *Bostrichus*, my homotypes, lectotype in Copenhagen Museum examined, compared to (= *Xyleborus silvestris* Beeson 1929:241) holotype in British Museum (Natural History), also compared to (= *Xyleborus granularis* Schedl 1950:898) lectotype in Wien Museum.

*Xylosandrus ater* (Eggers 1923:210), originally in *Xyleborus*, Eggers homotype compared to (= *Xyleborus retusiformis* Schedl 1936:31) holotype in Wien Museum.

*Xylosandrus cylindrotomicus* (Schedl 1939:40), originally in *Pseudoxyleborus*, lectotype in Wien Museum compared to (= *Xyleborus semitruncatus* Schedl 1942:115) lectotype in Wien Museum, also compared to (= *Xyleborus ramulorum* Schedl 1957:115) paratype in Wien Museum.

*Xylosandrus mutilatus* (Blandford 1894:103), originally in *Xyleborus*, my syntypes, holotype in British Museum (Natural History), compared to (= *Xyleborus sampsoni* Eggers 1930:184) holotype in FRI.

#### NEW NAMES

Treated below are names of Scolytidae that are regarded as junior homonyms of available names. The new names are presented in alphabetical order for ease of reference. Each name is followed by a citation of the original combination, author, year and page of validation, kind and sex of type, type locality, and type repository. This is followed by a brief statement of the action taken and a proposal for a new name. A complete reference to these citations (author, date, page) is presented at the end of this article in order to meet requirements of the code. These and other references used here may also be found in Wood and Bright (1987).

##### *Araptus frontis*, n. n.

*Gnathocranus frontalis* Schedl 1978:302 (Holotype, female; Brasilien, Encruzilhada, Bahia; Wien Museum). *Preoccupied*

The transfer of *Gnathocranus frontalis* Schedl 1978:302 to *Araptus* by Wood (1986:97) made it a junior homonym of *A. frontalis* Wood 1974:52 that must be replaced. The new name *frontis* is proposed as a replacement for the 1978 name as indicated above.

##### *Araptus guadeloupanus*, n. n.

*Brachydendrus guadeloupensis* Schedl 1970:91 (Holotype, sex?; Guadeloupe; Wien Museum). *Preoccupied*

The transfer of *Brachydendrus guadeloupensis* Schedl 1970:91 to *Araptus* by Wood (1986:97) made this name a junior homonym

of *A. guadeloupensis* Schedl 1951:73, a junior synonym of *A. laevigatus* (Eggers). Even though it is a synonym, the 1951 name is available and requires that the 1970 name be replaced. The new name *guadeloupanus* is proposed as a replacement as indicated above.

*Coccotrypes brunnipes*, n. n.

*Coccotrypes brunneus* Nunberg 1973:23 (Holotype, female; Congo Belge: P.N.A., Mont Hoyo, Grotte Yolahafiri, 1,030 m). *Preoccupied*

The name *Coccotrypes brunneus* Nunberg 1973:23 is preoccupied by *C. brunneus* (Nunberg 1960:616), formerly in *Poecilips*, and must be replaced. The new name *brunnipes* is proposed as a replacement as indicated above.

*Coccotrypes robustulus*, n. n.

*Poecilips robustus* Schedl 1972:227 (Holotype, female; Ceylon, Matale, 400 m; Museum d'Histoire Naturelle de Geneve). *Preoccupied*

The name *Coccotrypes robustus* (Schedl 1972:227), formerly in *Poecilips*, is preoccupied by *C. robustus* Eichhoff 1878:313 and must be replaced. The new name *robustulus* is proposed as a replacement as indicated above.

*Coccotrypes striatulus*, n. n.

*Thamnurgides striatus* Eggers 1927:82 (Holotype, female; Philippinen: Luzon, Provinz Laguna, Mount Maquilung; U.S. National Museum). *Preoccupied*

The name *Coccotrypes striatus* (Eggers 1927:82), formerly in *Thamnurgides*, is preoccupied by *C. striatus* Eggers 1920:33 and must be replaced. The new name *striatulus* is proposed as a replacement as indicated above.

*Hypothenemus aterrimulus*, n. n.

*Lepiceroides aterrimus* Schedl 1957:59 (Holotype, female; Ruanda: Ilembe; Tervuren Museum). *Preoccupied*

The Schedl paratypes of *Lepiceroides aterrimus* Schedl 1957:59 were examined and found (Wood 1986:92) to represent the genus *Hypothenemus*. The transfer made this species a junior homonym of *H. aterrimus* Schedl 1951:104 and must be replaced. The new name *aterrimulus* is proposed as a replacement for the 1957 name as indicated above.

*Hypothenemus ruginosus*, n. n.

*Pachynoderes rugifer* Schedl 1977:395 (Holotype, female; Südafrika: Potgietersrust, Transvaal; Wien Museum). *Preoccupied*

The transfer of *Pachynoderes rugifer* Schedl 1977:395 to *Hypothenemus* (Wood 1986:92) made it a junior homonym of *H. rugifer* (Schedl 1965:9) and must be replaced. The new name *ruginosus* is proposed for the 1977 name as indicated above.

*Mimiocurus monticulus*, n. n.

*Mimiocurus montanus* Schedl 1957:73 (Holotype, sex?; Congo Belge: Kivu, Hembé-Bitale; Tervuren Museum). *Preoccupied*

The name *Mimiocurus montanus* Schedl 1957:73 became a junior homonym when *M. montanus* (Schedl 1957:71), page priority, was transferred (Wood 1986:97) to this genus from *Micracidendron*, and must be replaced. The new name *monticulus* is proposed as a replacement as indicated above.

*Monarthrum boliviensis*, n. n.

*Cosmocorynus bolivianus* Schedl 1970:103 (Holotype, female; Bolivia, Yungas del Palmar, 2,000 m; Wien Museum). *Preoccupied*

The transfer of *Cosmocorynus bolivianus* Schedl 1970:103 to *Monarthrum* (Wood 1986:99) made it a junior homonym of *Monarthrum bolivianum* Eggers 1935:80, an available name that is currently treated as a synonym of *M. chapuisi* Kirsch. The new name *boliviensis* is proposed as a replacement for the 1970 name as indicated above.

*Monarthrum dentatulum*, n. n.

*Monarthrum dentatum* Eggers 1935:84 (Holotype, male; Bolivien, Cochabamba; U.S. National Museum). *Preoccupied*

*Monarthrum dentatum* Eggers 1935:84 became a junior homonym when *Amphicranus dentatum* Eggers 1931:19 was transferred to *Monarthrum* by Wood (1982:1216). The new name *dentatulum* is proposed as a replacement for the 1935 name as indicated above.

*Monarthrum sexdentatum*, n. n.

*Anchonocerus sexdentatus* Eggers 1935:331 (Holotype, male; Columbien, Aguatal; U.S. National Museum). *Preoccupied*

When the name *Anchonocerus sexdentatus* Eggers 1935:331 was transferred by Wood (1986:99) to *Monarthrum*, it became a junior homonym of *Monarthrum sexdentatum* Eggers 1935:83 and must be replaced. The new name *sexdentatum* is proposed as a replacement as indicated above.

*Pityophthorus abietinus*, n. n.

*Pityophthorus abietis* Kurenzov 1941:179, 234 (Lectotype, sex?; S Coast (Primorsky) region, Voroshilovsk district; Mountainous Taiga Station, Institute of Zoology, Academy of Science, Vladivostok, designated by Michalski 1969:895). *Preoccupied*

*Pityophthorus sibiricus* Nunberg 1956:208 (Automatic, replacement name for *P. abietis* Kurenzov). *Preoccupied*

The name *Pityophthorus abietis* Kurenzov 1941:179, 234 is preoccupied by *P. abietis* Blackman 1928:49 (a synonym of *P. opaculus* LeConte), and *P. sibiricus* Nunberg 1956:208 is preoccupied by *P. micrographus sibiricus* Stark 1952:344 (also recognized as a subspecies by Pfeffer 1976:335). Because both names are preoccupied, the new name *abietinus* is proposed as a replacement as indicated above.

*Pityophthorus brighti*, n. n.

*Pityophthorus blackmani* Bright 1977:521 (Holotype, female; Amecameca, Mexico, Mexico; U.S. National Museum). *Preoccupied*

The name *Pityophthorus blackmani* Bright 1977:521 became a junior homonym when *Conophthorocranulus blackmani* Schedl 1935:344 was transferred (Wood 1986:98) to *Pityophthorus*. Dr. Bright was notified of the homonymy and asked that I propose a new name here. The new name *brighti* is proposed as a replacement for the 1977 name as indicated above.

*Pityophthorus micrograptinus*, n. n.

*Breviophthorus micrographus* Schedl 1972:60 (Holotype, sex?; Brasilien, Jacareacanga, Para; Wien Museum). *Preoccupied*

When *Breviophthorus micrographus* Schedl 1972:60 was transferred (Wood 1986:98) to *Pityophthorus*, this species became a junior homonym of *P. micrographus* (Linnaeus 1758:355) and must be replaced. The new name *micrograptinus* is proposed as a replacement as indicated above.

*Pityophthorus subsimilans*, n. n.

*Breviophthorus subsimilis* Schedl 1966:104 (Holotype, sex?; Brasilien, Rio Caraguata, Matto Grosso; Wien Museum). *Preoccupied*

The transfer of *Breviophthorus subsimilis* Schedl 1966:104 to *Pityophthorus* (Wood 1986:98) made this name a junior homonym of *P. subsimilis* Schedl 1955:25 and must be replaced. The new name *subsimilans* is proposed as a replacement as indicated above.

*Scolytogenes papuensis*, n. n.

*Xylocryptus papuanus* Schedl 1975:352 (Holotype, sex?; Upper Manki L.A., Bulolo, Morobe District, New Guinea; Wien Museum). *Preoccupied*

When *Xylocryptus papuanus* Schedl 1975:352 was transferred to *Scolytogenes* (Wood 1986:90), it became a junior homonym of *S. papuanus* (Schedl 1974:459), formerly in *Cryphalophilus*, and must be replaced. The new name *papuensis* is proposed as a replacement as indicated above.

## NEW TAXA

*Cryphalus dipterocarpi*, n. sp.

This species was designated as *Hypocryphalus dipterocarpi* Beeson 1941:288, a nomen nudum, and has been cited under that name, although it has never been validated. It is distinguished from other Indian species by the transverse carina on the male vertex, by the pointed, almost hairlike ground setae on the basal half of the elytral disc, by the moderately slender body, by the distinctive, long, elytral vestiture, and by other characters described below. It is somewhat allied to *Cryphalus strohmeieri* Stebbing, although it is not closely related.

MALE.—Length 1.6 mm (paratypes 1.6–1.8 mm), 2.4 times as long as wide; color pale yellowish brown.

Frons broadly convex, sometimes with a weak median granule on epistoma; surface finely punctured and almost smooth and shining below upper level of eyes, almost impunctate above eyes, a subacute, conspicuous, transverse carina on vertex occupying more than median two-thirds. Vestiture fine, hairlike, restricted to area below carina, short except moderately long on epistoma. Antennal club rather small, sutures straight to very weakly procurved.

Pronotum 1.04 times as long as wide; sides subparallel and feebly arcuate on basal half, anterior margin moderately rounded and armed by six rather coarse serrations; summit slightly behind middle, asperities rather coarse, moderately abundant; posterior areas smooth, shining, finely, closely punctured. Ground vestiture not evident, erect hair sparse, moderately long on or near margins.

Elytra 1.3 times as long as wide; sides almost straight and parallel on basal two-thirds,



rather broadly rounded behind; striae evident on basal half of disc, obsolete behind, punctures distinctly impressed at base, fading in size and depth behind; interstriae at base three to four times as wide as striae, surface smooth, shining. Declivity rather steep, convex; sculpture as on posterior disc. Vestiture of abundant ground cover of short, rather slender hair, becoming basally stouter toward declivity, shorter and as pointed scales on declivity; interstitial rows of fine, erect, hair-like setae, each seta on disc slightly longer than distance between rows or spacing within a row, on declivity some setae almost twice as long.

FEMALE.— Similar to male except carina absent from vertex, frons more uniformly convex and more coarsely punctured; erect setae on elytra apparently slightly shorter.

TYPE MATERIAL.— The male holotype, female allotype, and nine paratypes were taken at Margherita Factory, Lakhimpur, Assam, from *Dipterocarpus pilosus*, by B. M. Bhatia. The holotype and allotype were taken on 14 January 1936, the paratypes on 13 January 1936. The holotype and allotype are in the Forest Research Institute, Dehra Dun; the paratypes are in my collection. There are many other specimens at FRI bearing the same or similar data, as well as a series labeled Inthabaing, Insein, Burma 31-XII-1926, from the same host, none of which could be included in the type series.

*Cryphalus felis*, n. sp.

This species is allied to *dipterocarpi* Wood, although the relationship is not close. It is distinguished from that species by the larger size, by the stouter body form, by the longer, much more abundant ground and erect hair, and by other characters described below. This is *Cryphalus felis* Beeson, nomen nudum, that has been cited in the literature.

MALE.— Length 2.0 mm (paratypes 1.9–2.0 mm), 2.1 times as long as wide; color a rather light brown.

Frons very broadly convex, surface finely rugose-reticulate to well above eyes; punctures fine, obscure; vertex with a weak, shining, poorly developed, transverse carina on median third, reticulate above carina. Vestiture inconspicuous, of sparse, fine, short and long hairlike setae.

Pronotum 0.83 times as long as wide; widest on basal fourth, outline obscurely triangular; anterior margin somewhat narrowly rounded and armed by six to eight small asperities; summit on basal fourth, asperities rather numerous, moderately large; posterior and lateral areas somewhat rugose, obscurely reticulate, punctures fine, rather obscure. Vestiture of fine, rather long hair.

Elytra 1.4 times as long as wide; outline about as in *dipterocarpi*; striae weakly indicated on basal third, minute punctures obscurely indicated almost to declivity; interstriae many times wider than striae, surface smooth, shining, punctures very small, confused. Declivity moderately steep, convex. Vestiture of fine, abundant, long hair, ground setae more abundant and half as long as erect setae; long setae in obscure rows toward declivity, some of them three or more times as long as distance between rows.

FEMALE.— Similar to male except carina not evident on vertex, pronotal asperities slightly larger.

TYPE MATERIAL.— The male holotype, female allotype, and three paratypes are from Mussoorie, U.P., India, R.R.D. 737, B.C.R. 108, cage 600, from *Vitis* sp., C.F.C. Beeson; one paratype emerged 1-IX-1927, the holotype and one paratype on 2-IX-1927, and the allotype and one paratype on 6-IX-1927. The holotype and allotype are in the Forest Research Institute, Dehra Dun, the paratypes in my collection. There are many other specimens in FRI under this name that could not be included in the type series.

*Cryphalus fulmineus*, n. sp.

This is *Cryphalus fulmineus* Beeson, nomen nudum, that has been cited in the literature. In the Indian fauna it is most nearly allied to *dorsalis* (Motschulsky) (= *indicus* Eichhoff), but it is distinguished by the more slender body form, by the absence of a transverse carina on the male vertex, by the very different epistomal area, by the host, and by other characters described below.

MALE.— Length 1.8 mm (paratypes 1.8–2.2 mm), 2.1 times as long as wide; color light brown.

Frons very broadly convex, a slight, almost flat impression in median area just above epistoma; vertex without a transverse carina;

surface rather strongly reticulate, some reticulation near epistoma in median area usually organized into feeble aciculation; punctures moderately coarse, indistinct. Antennal club rather broad, segment 1 very short, sutures distinctly procurved.

Pronotum 0.86 times as long as wide; general outline and asperities much as in *diptero-carpi*; anterior margin armed by six serrations, median pair usually much longer; posterior areas finely, closely granular, a few fine, obscure punctures in lateral areas. Vestiture hairlike, erect, not abundant, longer near lateral and anterior margins.

Elytra 1.4 times as long as wide; sides almost straight and parallel on more than basal two-thirds, rather broadly rounded behind; striae not impressed, punctures very fine, shallow, distinct, not close; interstriae almost smooth and shining, with numerous, very fine, confused punctures. Declivity steep, convex. Vestiture consisting of a ground cover of abundant, short scales, each scale slightly longer than wide and apically truncate; rows of erect setae extend almost to base, each moderately slender and spaced within and between rows by distances greater (1:1.25) than length of a seta.

FEMALE.— Similar to male except averaging slightly larger, pronotal asperities slightly larger.

TYPE MATERIAL.— The male holotype and female allotype (both mounted on one pin) and 11 paratypes were taken at Tharali, Garhwal, U.P., India, R.R.D. 185, B.C.R. 20, cage 760, from *Ahnus nitida*. The holotype and allotype emerged 25-VI-1937, the paratypes 26-28-29-VI-1937. Two paratypes are labeled Jubal, Simla, Punjab, 17-V-1924, 6000', C.F.C. Beeson. The holotype and allotype are in the Forest Research Institute, Dehra Dun; the paratypes are in my collection. Many more specimens of this species are in FRI.

*Gnathotrupes colaphus*, n. sp.

This species is distinguished from *crecentus* Wood by the larger, more slender body form, by the more convex and more finely armed elytral declivity, and by the much longer declivital vestiture.

MALE.— Length 2.2 mm (paratypes 2.0–2.3 mm), 3.4 times as long as wide; color light brown, areas on elytra darker.

Frons as in *crecentus* except sparse punctures much larger, slightly more numerous.

Pronotum 1.3 times as long as wide, otherwise as in *crecentus*.

Elytra 2.3 times as long as wide; outline and disc about as in *crecentus*. Declivity confined to less than posterior fourth, not as steep as *crecentus*, broadly convex; striae punctures very small, obscure; interstriae each with several minute granules from base to apex, none of them dominant. Vestiture confined to declivity, consisting of fine, confused hair of variable length, longest setae at least equal to combined width of three interstriae.

FEMALE.— Similar to male except serrations on anterior margin of pronotum not as high or as numerous.

TYPE MATERIAL.— The male holotype, female allotype, and 25 paratypes were taken on 9-XII-1969 at La Carbonera Experimental Forest, 50 km W Merida, Merida, Venezuela, 2500 m, No. 176, from an unidentified log, by me; 3 paratypes bear data as on the type except 27-X-1969, No. 91; 8 paratypes bear data as on the type except 28-IV-1970, No. 449, *Nectandra* sp.; 2 paratypes are from La Mucuy, Merida, Venezuela, 20-X-1969, 2500 m, No. 74, unidentified log, by me. The holotype, allotype, and paratypes are in my collection.

*Gnathotrupes nectandrae*, n. sp.

All series of this species were taken from the same logs that contained *colaphus* Wood, to which it is allied. This species is distinguished by the larger size, by the distinctive frons, and by the very different elytral declivity that is described below.

MALE.— Length 3.0 mm (paratypes 2.8–3.1 mm), 3.3 times as long as wide; color dark brown.

Frons convex, distinctly inflated on central area from small tubercle on epistomal margin to well above eyes, a few punctures on lateral thirds, central area smooth, shining, impunctate; vestiture restricted to sparse setae on epistomal margin. Antennal sutures strongly procurved.

Pronotum 1.2 times as long as wide, as in *colaphus*.

Elytra 2.1 times as long as wide; outline and disc about as in *elaphus*. Declivity very steep, flattened, almost as in *crecentus* Wood; a small tubercle at base of interstriae 2, much

smaller granules at bases of 3 and 4, two or three minute granules scattered near center of lateral face. Vestiture about as in *crecentus*.

FEMALE.— Similar to male in all respects except segmentation of abdomen.

TYPE MATERIAL.— The male holotype, female allotype, and 14 paratypes were taken at La Carbonera Experimental Forest, 50 km W Merida, Merida, Venezuela, 9-XII-1969, 2500 m, No. 176, from an unidentified log, by me; 10 paratypes bear data as on the type except 23 or 28-IV-1970, No. 449, *Nectandra* sp.; 2 paratypes are from La Mucuy, Merida, Venezuela, 20-X-1969, 2500 m, No. 74, from an unidentified log, by me. The holotype, allotype, and paratypes are in my collection.

*Mimiocurus beelsoni*, n. sp.

This is the second member of this genus named outside of Africa. It is distinguished from other known species by the small size, by the unique male frons as described below, and by the almost scalelike elytral setae.

MALE.— Length 1.4 mm (paratypes 1.2–1.4 mm), 3.0 times as long as wide; color yellowish brown.

Frons narrow above, half as wide as width of eye, shallowly concave, surface minutely rugose, impunctate, glabrous; a strongly elevated, subacute, transverse carina at upper level of eyes. Antennal club large, oval, distinctly longer than wide, devoid of sutures, minutely pubescent to base. Eyes very large, coarsely faceted.

Pronotum 0.94 times as long as wide; widest on basal third, sides arcuately converging to narrowly rounded anterior margin; anterior margin armed by two subcontiguous, slender serrations; summit at middle; asperities coarse, moderately abundant; posterior areas smooth, shining, punctures very minute, sparse. Vestiture of very sparse, fine, short hair.

Elytra 2.0 times as long as wide, 2.0 times as long as pronotum; sides almost straight and parallel on basal three-fourths, rather broadly rounded behind; striae not evident on disc, punctures minute, moderately abundant, strongly confused. Declivity moderately steep, shallowly sulcate; sculpture as on disc; sulcus about one-third elytral width, moderately shallow, lateral margins rounded, unarmed. Vestiture of ground cover of very short, rather stout hair, and erect scales;

scales in three interstrial rows on declivity, rows 1 and 2 extend forward to middle of disc, a few supplemental scales in lateral areas near apex, each scale about four times as long as wide.

FEMALE.— Similar to male except frons wider, broadly convex, carina absent.

TYPE MATERIAL.— The male holotype (upper), female allotype (middle), and one paratype (bottom), all mounted on one pin, and nine other paratypes were taken at Amarapalam R., Nilambur, Madras, India, IV-1933, from *Tiliacora acuminata*, by C.F.C. Beeson. The holotype, allotype, and one paratype are in the Forest Research Institute, Dehra Dun; nine paratypes are in my collection. Several other specimens bearing these data are in the FRI.

*Pityophthorus cedri*, n. sp.

Under this name is included *cedri* Beeson, *kashmirensis* Beeson, and *gerardianus* Beeson, all manuscript names that have been cited in the literature. Among Indian species, it is distinguished by the moderately impressed elytral declivity, by the occurrence of a conspicuous median carina on the frons of both sexes, and by the more nearly concentric pronotal asperities. As in most other Indian representatives of the genus, the discal interstriae are impunctate.

FEMALE.— Length 1.7 mm (paratypes 1.4–1.7 mm), 2.6 times as long as wide; color dark reddish brown.

Frons convex, shining, coarsely and closely punctured, subglabrous, with a conspicuous, acute, median carina.

Pronotum and elytral disc about as in *deodara* (Stebbing) except pronotal asperities in less definite concentric rows; pronotal disc more closely, deeply punctured. Elytral declivity distinctly, shallowly sulcate from slightly elevated suture to interstriae 3, 3 armed by three small granules, area between summits on 3 smooth, shining, impunctate. Vestiture of fine, sparse hair, limited to sides and declivity, setae on interstriae 3 rather long.

MALE.— Similar to female except serrations on anterior margin of pronotum and granules on elytral declivity distinctly larger.

TYPE MATERIAL.— The female holotype, male allotype, and two paratypes were taken at Buniyar, Jhelum Valley, Kashmir, India,



21-VI-1928, 5000', from *Cedrus deodara* twigs, by C.F.C. Beeson; four paratypes are labeled Kilba, U. Bashahr Div., Punjab, India, 26-V-1930, 7000', *Pinus gerardiana*, H.G. Champion. The holotype and allotype are in the Forest Research Institute, Dehra Dun, and the paratypes are in my collection. Numerous additional specimens in the FRI could not be included in the type series.

*Pityophthorus chilgoza*, n. sp.

Part of *chilgoza* Beeson, nomen nudum, is this species, part is of *deodara* (Stebbing). This species superficially resembles *deodara*, but it is not closely related. It is distinguished by the long pubescence on the female frons, by the absence of a carina on the female frons, by the less strongly (shallowly) impressed declivital sulcus, and by the much more confused arrangement of smaller pronotal asperities.

FEMALE.—Length 1.4 mm (allotype 1.45 mm), 2.8 times as long as wide; color yellowish brown.

Frons flat from eye to eye, finely, rather closely punctured near margins, ornamented by a marginal fringe of long hair, longest setae equal to about half width of frons, setae in central area sparse to obsolete and much shorter.

Pronotum 1.1 times as long as wide; sides on basal half almost straight and parallel, rather narrowly rounded in front, anterior margin armed by four serrations, median pair much longer; asperities smaller and more strongly confused than in other Indian species; posterior areas smooth, shining, rather finely, not closely punctured. Glabrous except for sparse setae near margins.

Elytra 1.8 times as long as wide; sides almost straight and parallel on basal two-thirds, rather narrowly rounded behind; striae not impressed, punctures moderately large, deep; interstriae less than twice as wide as striae, smooth, shining, impunctate. Declivity rather steep, weakly bisulcate; striae punctures minute, interstriae 2 widened, smooth, shining, impunctate, 3 unarmed, a few small punctures evident. Vestiture of minute striae hair and, on declivity, a few short, erect, interstitial setae.

MALE.—Similar to female except frons somewhat convex, its surface irregularly

punctate-rugose, shining, with a short, acute, median carina, vestiture inconspicuous, fine, short.

TYPE MATERIAL.—The female holotype, male allotype, and two paratypes were taken at Kilba, U. Bashahr Div., Punjab, India, 26-V-1930, 7000', from *Pinus gerardiana*, by H.G. Champion. The holotype and allotype are in the Forest Research Institute, Dehra Dun; the paratypes are in my collection. There are 12 specimens of this species in the FRI that could not be included in the type series.

*Pityophthorus glutae*, n. sp.

This is the most unique representative of the genus in India. It is distinguished by the larger size, by the strongly impressed elytral declivity, and by the unique female frons as described below.

FEMALE.—Length 1.8 mm (paratypes 1.8–2.1 mm), 3.0 times as long as wide; color yellowish brown.

Frons narrower than usual, flattened to feebly concave from epistoma to vertex from eye to eye, its shining surface closely, rather coarsely punctured, an acute median carina beginning just above epistomal margin and ending near vertex, its greatest height on upper half; vestiture of rather abundant, fine hair of moderate length on impressed area, median third of vertex giving rise to a pencil tuft of very long hair that tends to extend two-thirds of distance toward epistoma and conceal carina.

Pronotum 1.2 times as long as wide; sides almost straight and parallel on more than basal half, broadly rounded in front; anterior margin armed by eight or more low, basally confluent serrations; asperities rather small, numerous, confused; basal areas smooth, shining, with many impressed points and rather sparse, small punctures. Almost glabrous.

Elytra 1.7 times as long as wide; sides almost straight and parallel on more than basal two-thirds, rather narrowly rounded behind; striae not impressed, punctures rather coarse, deep; interstriae only slightly wider than striae, smooth, shining, impunctate. Declivity steep, strongly sulcate; striae 1 and 2 clearly punctured; interstriae 1 distinctly elevated, flat, gradually increasing in width toward apex, with a row of minute punctures

and one subapical granule; 2 smooth, shining, impunctate, widest just below middle, 3 strongly elevated and armed by three widely spaced, pointed denticles. Vestiture hairlike, very sparse, on or near declivity.

MALE.— Similar to female except frons broadly convex, without a carina, punctures less abundant, vestiture short, sparse, inconspicuous; serrations on anterior margin of pronotum larger; declivital impression slightly deeper, with two upper tubercles on each side larger, lower one reduced or obsolete.

TYPE MATERIAL.— The female holotype, male allotype, and two paratypes were taken at Tinnevely, S. Madras, VIII-1925, from *Gluta travancoria*, by D.F.O. Eight paratypes are labeled Evergreens, Tennevely, Madras, 4-V-1938, R.R.D. 294, B.C.R. 89, cage 500, *Gluta travancoria*, A.H. Khan. The holotype and allotype are in the Forest Research Institute, Dehra Dun, the paratypes in my collection. Several additional specimens are in the FRI and could not be included in the type series.

*Scolytogenes indicus*, n. sp.

The Schedl Collection in the Wien Museum contained a Schedl note that indicated he had confused *Cryphalomorphus indicus* Beeson, nomen nudum, with his *varius* from New Guinea. However, these species are quite unrelated. This species is smaller, more slender, more finely sculptured, and has stouter setae than does *varius*.

MALE.— Length 1.2 mm (paratypes 1.5–1.9 mm), 2.3 times as long as wide; color very dark brown, pronotum almost black, vestiture pale.

Frons broadly convex, median line above eyes forming a transversely etched, indefinite summit; surface finely rugose-reticulate on upper areas, smoother, roughly, not sharply punctured below, a transverse pair of widely spaced granules near middle; vestiture of fine, rather inconspicuous hair of moderate length. Pronotum 1.0 times as long as wide; widest on basal third, sides moderately arcuate, anterior margin rather broadly rounded; summit near middle, asperities on anterior slope rather coarse; rather finely, closely punctured behind, posterior margins of punctures toward summit slightly elevated to granulate, posterolateral punctures close, only slightly dis-

torted by subgranulation. Vestiture of rather short, recumbent hair.

Elytra 1.2 times as long as wide, 1.3 times as long as pronotum; striae not impressed, except weakly near declivity, punctures rather small, deep, in definite rows except confused on less than basal fourth of disc; interstriae almost twice as wide as striae, punctures near base resembling those of striae (and usually confused with them), their anterior margins elevated toward declivity to form rows of subvulcanate granules (one row on each interstriae). Declivity steep, broadly convex; sculpture about as on disc except interstriae 1 more distinctly impressed, granules on all interstriae larger in diameter but not higher than on disc. Vestiture consisting of very minute stria hair and rows of erect, pointed bristles; each bristle as long as distances between rows, spacing within a row distinctly less, setae stout but not scalelike, apical third of each tapered to a sharp point; a few short supplemental setae on declivity almost scalelike.

FEMALE.— Similar to male except area behind pronotal summit apparently more granulate; small, scalelike setae on elytral declivity more numerous.

TYPE MATERIAL.— The male holotype, female allotype, and two paratypes were taken at Amarkantak, Rewah State, C.I., 1928, 3500', R.R.D. 783, R.C.R. 144, cage 111, from Burma, by C.F.C. Beeson. The holotype emerged 23-II, allotype 25-II, paratypes 19 and 28-V. Nine paratypes are labeled Mandvi, W. Thana, Bombay 4, 9, or 12-XII-1929, R.R.D. 38, R.C.R. 114, cage 663, *Wrightia tinctoria*, B.M. Bhatia; three paratypes are labeled Gogaldara, Pir Panjal, Kashmir, India, 2-VI-1928, *Hedera helix*, C.F.C. Beeson; three paratypes are labeled Dehra Dun; U.P., India, 7-IV-1931, *Moringa pterygosperma*, M. Bose. The holotype and allotype are in the Forest Research Institute, Dehra Dun; the paratypes are in my collection. Several additional specimens in FRI could not be included in the type series.

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